ABSTRACT OF DISCLOSURE

VARIABLE SIZE FIRST IN FIRST OUT (FIFO) MEMORY WITH HEAD AND TAIL CACHING

A variable size FIFO memory is provided by the use of head and tail FIFO memories operating at a very high data rate and then an off chip buffer memory, for example, of a dynamic RAM type, which temporarily stores data packets when both head and tail FIFO memories are filled. Data blocks of each of the memories are the same size for efficient transfer of data. After a sudden data burst which causes memory overflow ceases, the head and tail FIFO memories return to the initial functions with the head memory directly receiving high speed data and transmitting it to various switching elements and the tail FIFO memory stores temporary overflows of data from the head FIFO memory.

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